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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,300	11/30/2005	Christophe Naulet	274267US6PCT	5268
22850	7590	05/26/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			DONDERO, WILLIAM E	
			ART UNIT	PAPER NUMBER
			3654	
			NOTIFICATION DATE	DELIVERY MODE
			05/26/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/542,300	NAULET ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	WILLIAM E. DONDERO	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 February 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 12-14, 17 and 22-26 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 12-14, 17 and 22-26 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 17 July 2008 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 23, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiminski et al. (US-4431138) in view of Green (US-3041663), Schippers et al. (US-5016829), and Ideno et al. (US-4511095). Regarding Claims 12 and 25, Schiminski et al. disclose a winding machine comprising a frame including a barrel 18 positioned on the frame, at least two spindles 9.1,9.2 fastened to the barrel, each of the spindles being configured to support at least one cake 8 and to be movable in rotation about a first axis substantially perpendicular to a diameter of the cake, at least one positioning and guidance device 1 configured to position and guide at least one thread 6 on the spindles, and a thread retraction device 11 configured to displace the at least one thread by grasping the thread and moving between a second position, in which the at least one thread is attached to one of the spindles and retracted from the positioning and guidance device, and a third position, in which the at least one thread is engaged with the positioning and guidance device, wherein the barrel is mounted movably in rotation with respect to the frame along a third axis of rotation substantially parallel to the first axis (Figures 1-12). Schiminski et al. is silent about a thread drawer including at least two motor-driven rollers configured to hold at least one thread at a first

position before the thread is attached to any of the at least two spindles, the rollers being fastened to the frame of the winding machine at a position directly below the at least two spindles; a straight ejector positioned above the at least two spindles and configured to move the thread from the first position to a second position such that the thread is attached to one of the spindles; a linear actuator configured to continuously drive the spindles in forward and reverse directions along the first axis during winding of at least one thread; the thread retraction device being positioned above the at least one positioning and guidance device and moving from the first position to the second position by rotation; and the thread overlaps a distal end of the one of the spindles when the thread is held at the first position. However, Green discloses a linear actuator 46 configured to continuously drive a spindle linearly in forward and reverse directions along a first axis during winding of at least one thread 16 (Figures 1-2; Column 3, Lines 63-74). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the linear actuator of Green to spindles of Schminiski et al. to build up the package as taught by Green (Column 3, Lines 63-74). Further, Schippers et al. disclose a winding machine comprising a thread retraction device 25 positioned above at least one positioning and guidance device 4 and configured to displace at least one thread 3 by grasping the thread and rotating between a second position (Figure 1B), in which the at least one thread is attached to one of the spindles and retracted from the positioning and guidance device, and a third position (Figure 1A), in which the at least one thread is engaged with the positioning and guidance device (Figures 1-8). Because both Schiminski et al. and Schippers et al. teach thread retraction devices, it would have

been further obvious to substitute the pivoting thread retraction of Schippers et al. for the sliding retraction device of Schminski et al. to achieve the predictable result of allowing the thread to be disengaged from the positioning and guidance device. Furthermore, Ideno et al. teach a thread drawer including at least two motor-driven rollers 9,10,11 configured to hold at least one thread 2b at a first position before the thread is attached to any of at least two spindles 6,6', the rollers being fastened to the frame of the winding machine at a position directly below the at least two spindles; a straight ejector 16 positioned above the at least two spindles and configured to move the thread from the first position to a second position such that the thread is attached to one of the spindles; and the thread overlaps a distal end of the one of the spindles when the thread is held at the first position (see Figure 6) (Figures 1-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the thread drawer and straight ejector of Ideno et al. to the winding machine of Shiminski et al. to assist with starting the winding of new packages as taught by Ideno et al.

Regarding Claims 23 and 26, Schminski et al. disclose a method for winding cakes comprising positioning a first spindle 9.1 and a second spindle 9.2 on a barrel 18 located within a frame; rotating the barrel so that the first spindle is in a thread receiving position; grasping a thread 6 with a thread retraction device 11 and moving the thread between a second position, in which the thread is attached to the first spindle and retracted from a positioning and guidance device 1, and a third position, in which the thread is engaged with the positioning and guidance device; rotating the first spindle having the thread around a first axis; guiding and positioning the thread onto the spindle

with the positioning and guidance device; and after building up the thread on the first spindle, rotating the barrel so that the second spindle is in the thread receiving position (Figures 1-12). Schminiski et al. are silent about holding at least one thread at a first position with rollers before the thread is attached to the first spindle or the second spindle, the rollers being fastened to the frame of the winding machine at a position directly below the first spindle and the second spindle; moving the thread from the first position to a second position with a straight ejector positioned above the first spindle and the second spindle such that the thread is attached to the first spindle; the thread retraction device positioned above the positioning and guidance device; rotating the thread retraction device between the first and second positions; driving continuously the first spindle linearly in a forward and reverse direction along the first axis while the first spindle is in the thread receiving position; and wherein the thread overlaps a distal end of the first spindle when the thread is held at the first position. However, Green discloses driving continuously a spindle 18 linearly in a forward and reverse directions along the first axis (via linear actuator 46) while the spindle is in a thread receiving position (Figures 1-2; Column 3, Lines 63-74). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the linear actuator of Green to continuously drive spindles of Schminiski et al. linearly in a forward and reverse direction to build up the package as taught by Green (Column 3, Lines 63-74). Further, Schippers et al. disclose a method for winding cakes, comprising grasping a thread 3 with a thread retraction device 25 positioned above a positioning and guidance device 4 and rotating the thread retraction device grasping the thread between a first position

(Figure 1B), in which the thread is retracted from the positioning and guidance device, and a second position (Figure 1A), in which the thread is engaged with the positioning and guidance device (Figures 1-8). Because both Schiminski et al. and Schippers et al. teach thread retraction devices, it would have been further obvious to substitute the pivoting thread retraction of Schippers et al. for the sliding retraction device of Schiminski et al. to achieve the predictable result of allowing the thread to be disengaged from the positioning and guidance device. Furthermore, Ideno et al. disclose a method for winding cakes comprising holding at least one thread 2b at a first position with rollers 9,10,11 before the thread is attached to a first spindle 6 or a second spindle 6', the rollers being fastened to the frame of the winding machine at a position directly below the first spindle and the second spindle; moving the thread from the first position to a second position with a straight ejector 16 positioned above the first spindle and the second spindle such that the thread is attached to the first spindle; and wherein the thread overlaps a distal end of the first spindle when the thread is held at the first position (see Figure 6) (Figures 1-17). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the rollers and straight ejector and the corresponding method steps of Ideno et al. to the method of Schiminski et al. to assist with starting the yarn on the new package as taught by Ideno et al.

Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiminski et al. (US-4431138) in view of Green (US-3041663), Schippers et al. (US-5016829), and Ideno et al. (US-4511095) as applied to claims 12 and 23 above, and further in view of Westrich (US-6105896). Schiminski et al. in view of Green,

Schippers et al., and Ideno et al. is silent about a index device configured to control a position of the barrel with respect to the frame by continuously modifying an angular position of the barrel as a function of a variation in the outside diameter of the cake, to keep a path of the thread constant between its exit point from the positioning and guidance device and its contact point on a periphery of the cake. However, Westrich discloses a winding machine comprising a index device configured to control a position of the barrel with respect to the frame by continuously modifying an angular position of the barrel as a function of a variation in the outside diameter of the cake, to keep a path of the thread constant between its exit point from the positioning and guidance device and its contact point on a periphery of the cake (Column 10, Line 60 – Column 11, Line 17). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the index device of Westrich in the machine of Schiminski et al. in view of Green, Schippers et al., and Ideno et al. to control the shape, size, and quality of the package as taught by Westrich.

Claims 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiminski et al. (US-4431138) in view of Green (US-3041663), Schippers et al. (US-5016829), and Ideno et al. (US-4511095) as applied to claims 12 and 23 above, and further in view of Sakurauchi (JP-06329437). Regarding Claim 14, Schiminski et al. in view of Green, Schippers et al., and Ideno et al. is silent about the positioning and guiding device including at least one helix mounted movably in rotation about a second axis, substantially parallel to the first axis. However, Sakurauchi discloses a winding machine with a positioning and guidance device including at least one helix 13 mounted

movably in rotation about a second axis, substantially parallel to a first axis (Figures 1-9). Because both Schiminski et al. in view of Green, Schippers et al., and Ideno et al. and Sakurauchi disclose positioning and guidance devices, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the positioning and guidance device of Sakurauchi for the positioning and guidance device of Schiminski et al. in view of Green to achieve the predictable result of guiding the thread onto the bobbin.

Regarding Claim 22, Schiminski et al. in view of Green, Schippers et al., and Ideno et al. is silent about a control and command device configured to ensure a regulation of speed and/or of position between a primary stroke movement of the positioning and guidance device and a secondary stroke movement of at least one of the spindles. However, Sakurauchi discloses a winding machine with a control and command device 39 configured to ensure a regulation of speed and/or of position between a primary stroke movement of the positioning and guidance device and a secondary stroke movement of at least one of the spindles (Translation Page 8-9, Paragraph [0020]). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the command and control device of Sakurauchi to the machine of Schiminski et al. in view of Green, Schippers et al., and Ideno et al. to have precise control of the winding parameters producing the desired package.

### ***Response to Arguments***

With respect to Applicant's arguments starting on page 7, line 24 to page 9, line 17, Applicant argues Schiminski, Green, Schippers, Westrich, and Sakurauchi,

alone or in combination, do not disclose or suggest the thread drawer, straight ejector, or how the thread is first attached to the spindles. Applicant's arguments with respect to claims 12 and 23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment, including the addition of the limitations, "a position directly below the at least two spindles" (Claim 12, Lines 8-9; Claim 23, Line 6) and "positioned above...attached to one of the spindles" (Claim 12, Lines 10-12; Claim 23, Lines 8-9), necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM E. DONDERO whose telephone number is

(571)272-5590. The examiner can normally be reached on Monday through Friday 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on 571-272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/  
Supervisory Patent Examiner, Art Unit 3654

/W. E. D./  
Examiner, Art Unit 3654